Gastric outlet obstruction secondary to incarcerated pylorus in an inguinal hernia

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ABSTRACT

Inguinal hernias are a common presentation to surgical admission units throughout the world. The majority of presentations are due to hernias containing either fat or small bowel. However, a wide range of intra-abdominal viscera have been demonstrated in inguinal hernias. We report a case of an 87-year-old man who presented with gastric outlet obstruction secondary to an incarcerated inguinal hernia containing the gastric pylorus.

KEYWORDS

Inguinal hernia – Surgery – Hernia repair – Gastric outlet obstruction

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Inguinal hernias are very common and may present to the surgical assessment unit with an incarcerated component. In the majority of cases, the hernia tends to contain pre-peritoneal fat or omentum but it does, on occasion, contain intra-abdominal viscera. In particular, large left-sided inguinoscrotal hernias can contain a loop of sigmoid colon in a 'sliding' type hernia.

A large proportion of inguinal hernias still only present when a complication occurs. The common presentations of complications range from painful and irreducible hernias to obstructed and potentially strangulated hernias. Treatment of this disorder is highly dependent on the presentation. The majority of patients are advised to undergo early elective open or laparoscopic repair to avoid future complications. We report a case of an 87-year-old man who presented acutely to the surgical assessment unit with gastric outlet obstruction secondary to a left-sided inguinal hernia containing the pylorus of the stomach, small bowel and left hemicolon.

Case History

An 87-year-old man with a background of a longstanding inguinoscrotal hernia, chronic obstructive pulmonary disease (COPD) and a previous open appendicectomy was admitted to the surgical assessment unit with symptoms suggestive of bowel obstruction. He reported a two-day history of colicky abdominal pain with associated vomiting and absolute constipation for four days prior to admission. His hernia had also increased in size and become painful over a 48-hour period.

Examination revealed a tender lower abdomen with a large left-sided inguinoscrotal hernia. The hernia was firm

and tender, and on auscultation, bowel sounds were present in the hernia. Computed tomography of the abdomen was undertaken. This revealed a massive left-sided inguinoscrotal hernia containing the pylorus of the stomach, a substantial length of small bowel and the left hemicolon (Fig 1).

The patient underwent an open left-sided inguinal hernia repair with a standard Lichtenstein technique, using a Vicryl® (Ethicon, Somerville, NJ, US) mesh via a groin crease incision. Postoperatively, he developed hospital acquired pneumonia requiring antibiotics but he made a full recovery and was discharged home.

Discussion

A number of intra-abdominal organs have been reported in groin hernias including the appendix, bladder, small and large bowel, and ovaries. There are approximately 60 cases of inguinal hernias containing the stomach, the majority prior to 1980. It has been hypothesised that the emphasis of early open or laparoscopic repair to prevent the occurrence of complications is responsible for this distribution of cases. Although there is little evidence to support the hypothesis that COPD may increase the likelihood of the gastric pylorus being contained in an inguinal hernia, owing to the so-called gastrointestinal ptosis, there is a report of two other cases in which it may have contributed.¹

There is limited literature in terms of potential complications of incarcerated inguinal hernias containing stomach, with only three previous cases of gastric strangulation.^{2–4} A case reported in 2012 also described gastric ischaemia secondary to distension in a patient presenting with gastric outlet obstruction.⁵ Given the potential for catastrophic

Figure 1 Computed tomography of the abdomen revealing a left-sided inguinoscrotal hernia containing the pylorus of the stomach, small bowel and left hemicolon

complications such as gastric rupture, we would recommend operative repair in those patients able to undergo surgery to avoid both early and late complications.

Conclusions

Inguinal hernias can present with a wide range of intra-abdominal content. In the majority of cases, management of the hernia will be based on the clinical picture and patient co-morbidities. Ideally, all inguinal hernias should be repaired electively, either via an open or laparoscopic approach depending on patient fitness for surgery, with the aim of reducing the risk of acute admission with complications. For cases with gastric outlet obstruction secondary to the pylorus of the stomach in the hernia, early operative intervention should take place if the patient is fit enough to undergo anaesthesia as this will reduce the risk of further complications.

References

1. Díaz Oller J, Medina Domínguez MT, Arcos Navarro A *et al.* Stomach in inguinal-scrotal hernia. *Rev Esp Enferm Dig* 1997; **89**: 325–328.
2. Gue S. Spontaneous rupture of the stomach. A rare complication of inguinal hernia. *Br J Surg* 1970; **57**: 154–155.
3. Padmanabhan AI, Lowenfels AB. An unusual hernia. *JAMA* 1976; **235**: 2,813.
4. Nagendran T. Stomach contained in a giant scrotal hernia. *Am Surg* 1977; **43**: 473–476.
5. Kerschaefer I, Poelmans S, Vankeirsbilck J, Vandewoude M. Rare cause of gastric outlet obstruction: incarcerated pylorus within an inguinal hernia. *Ann R Coll Surg Engl* 2012; **94**: e46–e48.